CE Mark Declaration of Conformance for EMI and Safety (EEC)

This is to certify that this product complies with ISO/IEC Guide 22 and EN45014. It conforms to the following EMC specifications:

EN55022(1988)/CISPR-22(1985)	Class A
EN60555-2(1995)	Class A
EN60555-3	
IEC1000-4-2(1995)	4kV CD, 8kV AD
IEC1000-4-3(1995)	3V/m
IEC1000-4-4(1995)	1kV - (power line), 0.5kV - (signal line)
IEC 1000-4-6(1995)	3Vrms

This product complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC.

Warning! Do not plug a phone jack connector in the RJ-45 port. This may damage this device. Les raccordeurs ne sont pas utilisé pour le système téléphonique!

VCCI Class A Compliance (Japan)

この装置は、情報技術装置等電波障害自主規制協議会（ＶＣＣＩ）の基準
に基づくクラスＡ情報技術装置です。この装置を家庭環境で使用すると電波
妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ず
るよう要求されることがあります。

Warranty

Accton warrants to the original owner that the product delivered in this package will be free from defects in material and workmanship for the lifetime of the product. For the warranty to apply, you must register your purchase by returning the registration card indicating the date of purchase and including proof of purchase. There will be a minimal charge to replace consumable components, such as fuses, power transformers, and mechanical cooling devices. The warranty does not cover the product if it is damaged in the process of being installed.

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EM3554
E1297-R01
150826-101

Accton

EM3554 Slide-in Switch Modules
User's Guide

The EM3554 Slide-in Modules

The EM3554 Slide-in Modules are designed for use in Accton switch models which have a 4-port Fast Ethernet transceiver slot. At present, suitable units include the:

- CheetahSwich Workgroup (ES3508A)

Caution: Do not install these modules in any other units. Contact your distributor for advice on newly released switches which may be designed for use with these modules.

The EM3554 includes the following modules:

- EM3554-TX
  4 10BASE-T/100BASE-TX (RJ-45) Ports
- EM3554-FX-SC
  4 100BASE-FX (SC-Type) Ports
- EM3554-FX-ST
  4 100BASE-FX (ST-Type) Ports
- EM3554-TF-SC
  2 10BASE-T/100BASE-TX (RJ-45) Ports and 2 100BASE-FX (SC-Type) Ports
- EM3554-TF-ST
  2 10BASE-T/100BASE-TX (RJ-45) Ports and 2 100BASE-FX (ST-Type) Ports

These modules provide all the available ports for applicable units, and provide high-speed access to your network, or a direct connection to a local server or workstation.

Information about configuring these modules and advice about Fast Ethernet configuration rules can be found in the switch's user guide.

Safety Warning

Before installing or removing the EM3554, first disconnect the switch from the main power supply. For full safety instructions, please refer to the user guide that accompanies the switch.

Warning: *Optical Safety for Fiber Optic Modules*

Under normal conditions, the fiber optic transmit LED (Light Emmitting Diode) presents no hazard to your eyes. However, we recommend that you do not directly view the fiber TX port or fiber cable ends when the unit is powered on. Nor should you view the LED through a magnifying device when the unit is powered on.

Handling the Module

Caution: The EM3554 can easily be damaged by electrostatic discharge.

To prevent electrostatic damage, observe the following guidelines:

- Do not remove the EM3554 from its packaging until you are ready to install it.
- Do not touch any of the module's pins, connectors or components.
- Hold the module only by its edges or front panel.
- Wear an anti-static wristband connected to a suitable earth ground whenever handling the module.
- Store or transport these modules only in appropriate anti-static packaging.

Installing the EM3554

1. Ensure that the switch is disconnected from the main power supply, and you are wearing an anti-static wristband connected to a suitable earth ground.
2. Place the unit on a flat surface. Using a flathead screwdriver, remove the screws from the cover plate covering an empty slot on the front panel of the switch.
3. Keep the cover plate in a safe place. If you remove the module, replace the cover plate to prevent dust and debris from entering the unit and to maintain proper air flow.
4. Holding the module with the text on the front panel upright, slide it into the unit, ensuring that the edge connector is fully engaged. Be sure the front panel of the module is flush against the switch, and then attach it to the unit with the retainer screws attached to the face plate.

Making Fiber Optic Connections

1. Remove the cover from the fiber connector on the EM3554. Keep it in a safe place, and place it back on the connector if you unplug the fiber cable from the module.
2. Plug the fiber connector on the cable into the fiber optic socket on the module.
3. Connect the other end of the cable to any device that has a standard 100BASE-FX Fast Ethernet fiber interface.

   Notes: A fiber optic cable cannot exceed 2 km (1.24 miles) at full duplex or 412 m (1351 ft) at half duplex. This maximum length may be less when connecting to a Fast Ethernet repeater. (Refer to the switch's user guide for more detailed information on cable length.)
4. Use the configuration method provided by your switch to match the communication mode of the attached device by setting the module to full or half duplex.

Making Twisted-Pair Connections

1. Prepare 100Ω Category 3, 4 or 5 cable for standard 10 Mbps Ethernet connections, or 100Ω Category 5 cable for 100 Mbps Fast Ethernet connections.
2. To connect to any device that uses a standard network interface such as a workstation or server, use the MDI-X (RJ-45) ports on the module. When using the port with the selector switch, set it to MDI-X.

   To make a direct connection to another compatible switch or repeater hub, connect the (RJ-45) MDI daisy-chain port on the module to an MDI-X port on the other device. When using the port with the selector switch, set it to MDI.

   Caution: Do not plug a phone jack connector into any RJ-45 port. This may damage the switch. Instead, use only twisted-pair cables with RJ-45 connectors that conform with FCC standards.

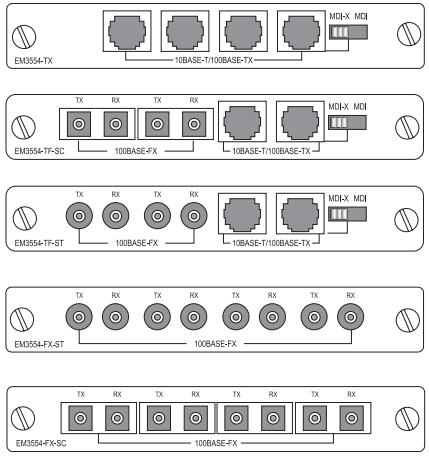
   Notes: When connecting to another switch or hub, you can also connect any MDI-X port on the module to an MDI port on the other device; or if an MDI port is not available, you can use crossover cabling and attach to MDI-X ports at both ends.

   Make sure each twisted-pair cable does not exceed 100 meters (328 feet).

   We advise using Category 5 cable for all network connections to avoid any confusion or inconvenience in the future when you upgrade attached devices to Fast Ethernet.

Putting the Switch Online

1. Power up the switch.
2. Check the LED indicators on the switch to ensure that the EM3554 is operating correctly. Refer to the switch's user guide for a description of the LED indications.



EM3554 Slide-in Modules

Troubleshooting

If you experience any problems with the module, check the following items before contacting your distributor:

- Ensure the switch with the slide-in module is powered up.
- Ensure that the device attached to the module is powered up and operating correctly.
- Ensure that the module is properly seated in the slot.
- Verify that the ports are configured to match to the communication mode used by the attached device (full or half duplex, or auto-negotiation for the RJ-45 ports).
- Check all connectors on both ends of the cables to be sure they are properly engaged. When inserting twisted-pair cable into an RJ-45 port, be sure the plug clicks into place to ensure that it is properly seated.
- If you are using fiber optic cable –

  Try switching the TX and RX connections.

  Clean the cable plugs by wiping them gently with a clean tissue or cotton ball moistened with a little ethanol. Dirty fiber terminators on the fiber optic cables will impair the quality of the light transmitted through the cable.

Specifications

Power Consumption	12.5 Watts at 5 VDC
Temperature	0°C to 40°C (32 to 104°F) Standard Operating
Humidity	5% to 95% (Noncondensing)
Standards	IEEE 802.3, IEEE 802.3u ISO/IEC 8802-3
Certification	CE Mark
Emissions	FCC Class A, VCCI Class A, CISPR Class A
Immunity	IEC 1000-4-2/3/4/6
Safety	UL, CSA, TÜV/GS

EMI Certification

FCC Class A (USA)
This equipment has been tested with a Class A computing device and has been found to comply with part 15 of FCC Rules. Operation in a residential area may cause unacceptable interference to radio and TV receptions requiring the operator to take whatever steps are necessary to correct the interference.

You may use unshielded twisted-pair (UTP) for RJ-45 connections - Category 3 or greater for 10 Mbps connections, and Category 5 for 100 Mbps connections.

Class A (Canada Department of Communications)
This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of the Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: "Appareils Numérques," NMB-003 édictée par le ministère des Communications.